

REMARKS

In the final Office Action, the Examiner rejected claim 1 under 35 U.S.C. § 103(a) as unpatentable over Zhang et al. (U.S. Patent No. 6,181,711) in view of Duault et al. (U.S. Patent No. 6,108,336) and Jones et al. (U.S. Patent No. 6,307,836); rejected claims 2-7, 9-14, and 16-24 under 35 U.S.C. § 103(a) as unpatentable over Zhang et al. in view of Duault et al., Jones et al., and Grossglauser et al. (U.S. Patent No. 5,604,731); and rejected claims 8 and 15 under 35 U.S.C. § 103(a) as unpatentable over Zhang et al. in view of Duault et al., Jones et al., and Applicant's admitted prior art (hereinafter "AAAPA").

By this Amendment, Applicant amends the specification and claims 1-7, 9-14, and 16-24 to improve form. Applicant respectfully traverses the Examiner's rejections under 35 U.S.C. § 103 with regard to the currently pending claims. Claims 1-24 remain pending.

In paragraph 7 of the Office Action, the Examiner rejected claim 1 under 35 U.S.C. § 103(a) as allegedly unpatentable over Zhang et al. in view Duault et al. and Jones et al. Applicant respectfully traverses the rejection.

Amended independent claim 1 is directed to a statistical multiplex transmission system for use in a network which includes a first local area asynchronous transfer mode (ATM) network including a plurality of first terminal devices, a second local area ATM network including a plurality of second terminal devices, and a public ATM network connected to the first and second ATM networks. The system comprises a first multiplex gateway device for connecting the first local area ATM network and the public ATM network and a second multiplex gateway device for connecting the second local area ATM network and the public ATM network. The first and second multiplex gateway devices are configured to receive ATM

transmission signals from the first and second local area ATM networks, respectively, perform a statistical multiplexing process to determine statistical information based on a mean rate and a peak cell rate associated with the ATM transmission signals and generate transmission statistical multiplex signals based on the statistical information, and transmit the transmission statistical multiplex signals to the public ATM network.

Neither Zhang et al., Duault et al., nor Jones et al., whether taken alone or in any reasonable combination, discloses or suggests the combination of features recited in amended claim 1. For example, neither Zhang et al., Duault et al., nor Jones et al. discloses or suggests first and second multiplex gateway devices that are configured to, among other things, perform a statistical multiplexing process to determine statistical information based on a mean rate and a peak cell rate associated with the ATM transmission signals and generate transmission statistical multiplex signals based on the statistical information.

With regard to a similar feature in claim 4, the Examiner admitted that none of the references discloses using a mean rate and a peak rate as statistical information (final Office Action, page 6). The Examiner alleged, however, that Zhang et al. discloses that digital video encoders must assume a particular bit rate profile, which refers to the fact that the bit rate may not be constant, but variable under certain constraints, such as peak bit rate, average bit rate, minimum bit rate, etc. and cited column 9, lines 2-12 of Zhang et al. for support (final Office Action, pages 6-7). Applicant respectfully submits that this is not equivalent to the above-identified feature of claim 1.

At column 9, lines 2-12, Zhang et al. discloses:

When the digital video is first compressed, the encoder must assume a particular bit rate profile, whether it is constant bit rate (CBR) or a variable bit rate (VBR). The word "profile" refers to the fact that bit rate may not be constant, but variable under certain constraints, such as peak bit rate, average bit rate, minimum bit rate, etc. For example, a constant bit rate stream at 4 Mbps does not have the same bit rate profile as a variable bit rate stream at an average of 4 Mbps but has larger maximum bit rate and smaller minimum bit rate, respectively.

This reference in Zhang et al. to a bit rate profile and a bit rate that may be variable under certain constraints, such as peak bit rate, average bit rate, and minimum bit rate falls short of disclosing or suggesting determining statistical information based on a mean rate and a peak cell rate associated with ATM transmission signals, as required by claim 1. Therefore, contrary to the Examiner's apparent allegation, nowhere in this section of Zhang et al., or elsewhere, does Zhang et al. disclose or suggest a first or second multiplex gateway device that is configured to, among other things, perform a statistical multiplexing process to determine statistical information based on a mean rate and a peak cell rate associated with ATM transmission signals and generate transmission statistical multiplex signals based on the statistical information, as required by claim 1.

The disclosures of Duault et al. and Jones et al. provide nothing to cure these deficiencies in the disclosure of Zhang et al.

For at least these reasons, Applicant submits that claim 1 is patentable over Zhang et al., Duault et al., and Jones et al., whether taken alone or in any reasonable combination.

In paragraph 8 of the final Office Action, the Examiner rejected claims 2-7, 9-14, and 16-24 under 35 U.S.C. § 103(a) as allegedly unpatentable over Zhang et al. in view of Duault et al., Jones et al., and Grossglauser et al. Applicant respectfully traverses the rejection.

Claims 2-7 and 9-12 depend from claim 1. The disclosure of Grossglauser et al. does not cure the deficiencies in the disclosures of Zhang et al., Duault et al., and Jones et al. identified above with regard to claim 1. Therefore, claims 2-7 and 9-12 are patentable over Zhang et al., Duault et al., Jones et al., and Grossglauser et al., whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 1.

Amended independent claims 13 and 20 recite features similar to features recited in claim 1. The disclosure of Grossglauser et al. does not cure the deficiencies in the disclosures of Zhang et al., Duault et al., and Jones et al. identified above with regard to claim 1. Claims 13 and 20 are, therefore, patentable over Zhang et al., Duault et al., Jones et al., and Grossglauser et al., whether taken alone or in any reasonable combination, for at least reasons similar to reasons given with regard to claim 1. Claims 14, 16-19, and 21-24 variously depend from claims 13 and 20. Claims 14, 16-19, and 21-24 are, therefore, patentable over Zhang et al., Duault et al., Jones et al., and Grossglauser et al., whether taken alone or in any reasonable combination, for at least the reasons given with regard to claims 13 and 20.

In paragraph 9 of the final Office Action, the Examiner rejected claims 8 and 15 under 35 U.S.C. § 103(a) as allegedly unpatentable over Zhang et al. in view of Duault et al., Jones et al., and AAPA. Applicant respectfully traverses the rejection.

Claims 8 and 15 depend from claims 1 and 13, respectively. The AAPA disclosure does not cure the deficiencies in the disclosures of Zhang et al., Duault et al., and Jones et al. identified above with regard to claims 1 and 13. Therefore, claims 8 and 15 are patentable over Zhang et al., Duault et al., Jones et al., and AAPA, whether taken alone or in any reasonable combination, for at least the reasons given with regard to claims 1 and 13.

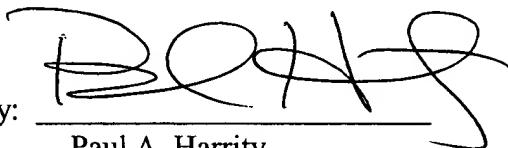
In view of the foregoing amendments and remarks, Applicant respectfully requests the reconsideration of this application and the timely allowance of the pending claims.

If the Examiner does not believe that all pending claims are now in condition for allowance, the Examiner is urged to contact the undersigned to expedite prosecution of this application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

HARRITY & SNYDER, L.L.P.

By: 
Paul A. Harrity
Reg. No. 39,574

Date: March 28, 2005

11240 Waples Mill Road
Suite 300
Fairfax, Virginia 22030
Telephone: 571-432-0800
Facsimile: 571-432-0808